New Jersey Semi-Conductor Products, Inc.

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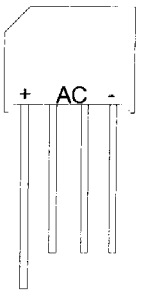
RS-4

SINGLE-PHASE BRIDGE RECTIFIER
RS401 THRU RS407

VOLTAGE RANGE 50 to 1000 Volts
CURRENT 4.0 Amperes



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: Transfer molded plastic
- Terminal: Lead solderable per MIL-STD-202E method 208C
- Mounting: Any
- Weight: 0.22 ounce, 6.21 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load derate current by 20%.

	SYMBOLS	RS401	**RS402**	RS403	**RS404**	RS405	RS406	RS407	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, at T_L=50 °C (Note 2)	$I_{(AV)}$	4.0							Amps
Maximum Average Forward Rectified Output Current, at T_A=50°C (Note 3)	$I_{(AV)}$	3.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							Amps
Rating for Fusing (t<8.3ms)	I^2t	93							A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 4.0A	V_F	1.0							Volts
Maximum DC Reverse Current at rated DC blocking voltage per element T_A=25°C	I_R	10							µAmps
Maximum DC Reverse Current at rated DC blocking voltage per element T_A=100°C	I_R	1.0							mAmps
Typical Junction Capacitance (Note 1)	C_J	55							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	20							°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150							°C

NOTES:
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on 3.0"x3.0"x0.11" thick (7.5x7.5x0.3 cm) Al. plate.
3. P.C. Board mount with 0.5"x0.5" (12x12cm) copper pads 0.375" (9.5mm) lead length

Quality Semi-Conductors